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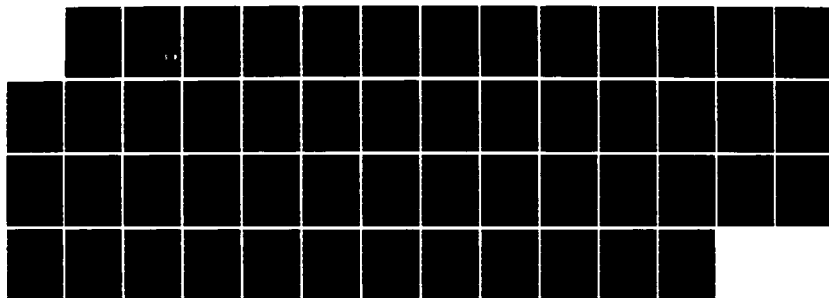
CONTRACTOR EVALUATION REPORT FOR TACTICAL INTERFACE
SYSTEM(U) ANALYTICS INC MCLEAN VA 28 FEB 83
1585-TR-00(R1) DRAK80-81-C-0010

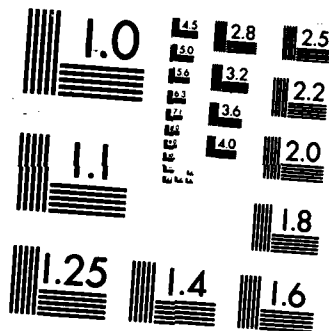
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Technical Report 1585-TR-08(R1)

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AD-A173 428

CONTRACTOR EVALUATION REPORT
ON
TACTICAL INTERFACE SYSTEM
(FINAL)

Submitted to:
CENTACS
Computer Systems Integration and Operations Division
Ft. Monmouth, New Jersey 07703

Contract Number DAAK80-81-C-0010
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28 February 1983

Prepared by the Staff of Analytics

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SUMMARY

The Acceptance Test for the Tactical Interface System (TIS) was held on 6-7 December 1982 at Fort Sill, Oklahoma. The Support System Interface Module (SSIM) and the TIS software executing on the VAX-11/780 were functionally tested in accordance with the approved Acceptance Test Plan for Tactical Interface System, 5 November 1982. The purpose of the test was to verify that the hardware and software met the requirements detailed in the Computer Program Development Specification of 31 July 1982. As per Attachment A to DI-T-1904 of the contract, the compilation and assembly of selected TACFIRE modules and system generation of the TACFIRE system were performed as part of the test.

The test was conducted under the hardware configuration as shown in Figure S-1.

The results of the test are that a "bare bones" PSS system was successfully generated. This system loaded and functioned correctly.

This document contains the test procedures and observed results of the Acceptance Test.

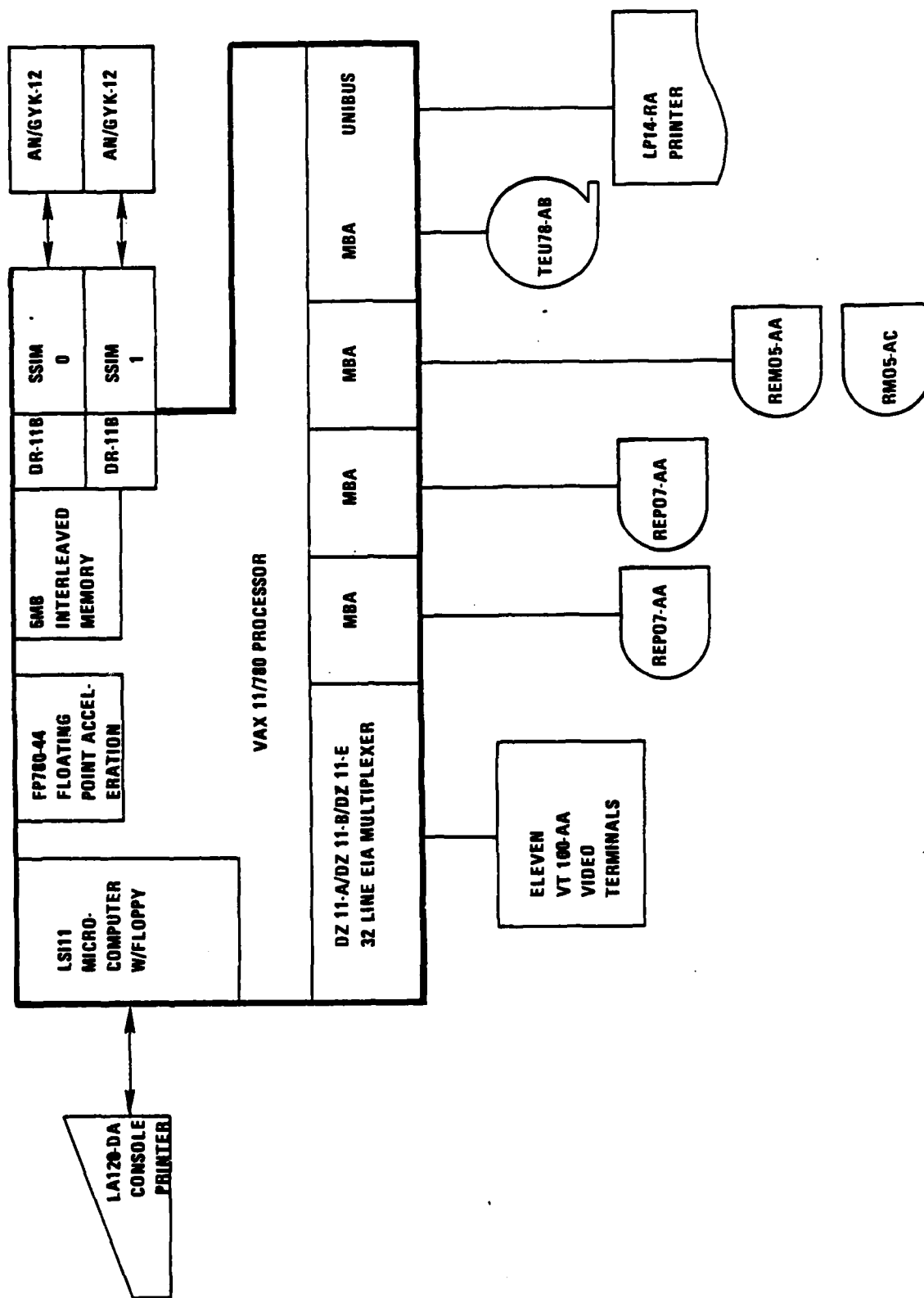


Figure 5-1. FSSG VAX 11/780 Computer Configuration, Ft. Sill

83-31-005-TR

1. TEST PROCEDURES

The test procedures specified in this section are the procedures and methods used for the Acceptance Test of the Tactical Interface System.

The Acceptance Test consisted of five separate tests. These tests were:

- (1) TIS Installation
- (2) Starting TIS
- (3) PSS Operations
- (4) TIS Termination
- (5) Utilities

With these five tests all functions of the system were verified, including the capability to build the system from source.

The first test, TIS Installation, tested the capability to generate a viable TIS from a TIS backup tape. The procedures in this test restored all files to the disk, created the necessary logical names, built the system from source, built the utilities from source, installed the device driver, and created all the necessary symbols and messages. When this test was complete, TIS was ready to run on the VAX-11/780.

The second test, Starting TIS, tested the capability to run and configure TIS by the TIS manager(s). The procedures in this test demonstrated the capability to enter and exit TIS command language mode, start the system, configure the User Status Table, set up TIS dynamic parameters, and configure tape

drives. When this test was complete, TIS was running and configured for operations with PSS.

The third test, PSS Operations, tested the operational interface with PSS. The procedures in this test down-line loaded the PSS system, processed the job input queue, processed the job output, performed PSS operator communications, and executed a system generation to build a V 5.0 PSS system. Included in this test were various TIS commands to monitor the operations.

The fourth test, TIS Termination, tested the capability to terminate the system in the normal mode and when the PSS crashes.

The fifth test, TIS Utilities, tested the utility ADUMP functions POPTOP, TAPEUTIL and DISKPURGE.

The TIS error logging, history logging, and ADUMP functions were used throughout the tests to verify correct operation.

1.1 TIS INSTALLATION

Test Procedure 1.1 Restore TIS

Purpose: To test restoring the TIS from tape to disk.

Required data: A TIS backup tape.

STEP 1

The TIS backup tape must be mounted foreign with the VMS command:

```
$ALLOC MFAO:  
$MOUNT/FOREIGN/DENS:1600 MF:TISBAK
```

Result: When the mount operation completed, VMS responded with:

```
%MOUNT-I-MOUNTED. TISBAK MOUNTED ON MFAO:
```

STEP 2

Enter the VMS command:

```
$MOUNT/SYS DRB1:  
$BACKUP/LIST MF:DRB1:[*...]
```

Result: The BACKUP transferred the save set to the specified disk, and listed all files transferred. The TIS directory and all subdirectories were inspected using the VMS commands:

```
$DIR [TISEXE]  
$SET DEF [TIS]  
$DIR *.*
```

Test Procedure 1.2 Create Logical Names

Purpose: To create the process, group, and system logical names required by TIS.

Required data: ASSIGNS.COM, GROUPNAMS.COM

STEP 1

To assign the process symbols and logical names, run the command procedures:

@SYMBOLS

@ASSIGNS

STEP 2

Enter the VMS command:

SHOW LOGICAL/PROC

Result: The TIS process logical names were displayed.

STEP 3

To create the TIS group local names for group 300, run the command procedure:

@TIS

STEP 4

Enter the VMS command:

SHOW LOGICAL/GROUP

Result: The TIS group logical names were displayed.

Test 1.2 (Continued)

STEP 5

To create the system Logical Name TIS\$SYSTEMs, enter the VMS command:

ASSIGN/SYS DRB1: [TISEXE] TIS\$SYSTEM

STEP 6

Enter the VMS command:

SHOW LOGICAL/SYS

Result: TIS\$SYSTEM is in the VMS System Logical Name Table.

Test Procedure 1.3 Assemble/Compile TIS

Purpose: To build the TIS object modules from source.

Required data: BUILDTIS.COM

STEP 1

To assemble/compile all or some of the TIS modules, enter the VMS command:

```
SET DEFAULT TIS$BUILD
```

and run the command procedure:

```
@BUILDTIS
```

and enter response to prompts.

Result: The directory TIS\$OBJECTS contained the object modules for all the TIS components.

Test Procedure 1.4 Link TIS

Purpose: To link all TIS modules and install the TIS global area and run time library.

Required data: BUILDTIS.COM

STEP 1

Run the command procedure BUILDTIS by entering the VMS command:

@BUILDTIS

STEP 2

Answer no to the compilation prompt. Answer yes to the prompt:

Do you want to link any TIS modules?

If maps are desired, answer yes to the next prompt. The procedure prompts the user component by component. Answer yes to all prompts.

Results: Executable images for CMDINTRP, FILEOPS, JOBOPS, ICEHANDLE, JBDRIVER, SYSINITRM, TAPEOPS, and USERMSGP were in TIS\$SYSTEM. Executable images for TISGLOBAL and TISRTL were in SYS\$LIBRARY.

Test Procedure 1.5 Install JB DRIVER

Purpose: To install into the VMS system the DR-11B device driver — JBDRIVER.

Required data: JBCONNECT.COM

STEP 1

To load and connect JBDRIVER from the command procedure JBCONNECT.COM by entering:

\$GET SYSTEM

@TISINSTAL

Result: The drive was installed in VMS with a CSR of octal 772414 and vector address octal 124.

Test Procedure 1.6 Compile and Link Utilities

Purpose: To compile the TIS utility programs.

Required data: BUILDUTL.COM

STEP 1

Set default to TISSBUILD and run the command procedure BUILDUTL by entering:

@BUILDUTL

STEP 2

Answer yes to the prompt: Do you want to compile any TIS utilities?

If listings are desired, answer yes to the next prompt. The command procedure will prompt the user for each utility. Answer yes to all prompts.

Results: Object modules for ADUMP, POPTOP, DISKPURGE, TAPEUTIL, SSIMTEST, and TISMSGGEN were in TISSUTILITIES.

STEP 3

Answer yes to the prompt: Do you want to link any TIS utilities? Link the utilities by answering yes to each prompt.

Result: Executable images for all utilities were in TISSUTILITIES.

Test Procedure 1.7 Create TIS Symbols

Purpose: To create the symbols for running TIS.

Required data: SYMBOLS.COM

STEP 1

To create the TIS symbols, run the command procedure SYMBOLS.COM by entering the VMS command:

```
@SYMBOLS
```

Normally this procedure is executed in the LOGIN.COM command procedure.

STEP 2

Verify the symbols were created by entering the VMS command:

```
SHOW SYMBOL/ALL/GLOBAL
```

Result: The TIS symbols were displayed.

1.2 STARTING TIS

Test Procedure 2.1, Enter/Exit TIS

Purpose: To test the capability to enter and exit TIS Command Language Mode.

Required data: None.

STEP 1

Enter the symbol TIS, which was created in test 1.8.

Result: The TIS prompt: TIS>

STEP 2

To ensure TIS command language mode active, enter aaaa.

Result: TIS — Invalid Command.

STEP 3

To ensure CNTRL Y disabled,*enter CNTRL Y.

RESULT: TIS prompt.

STEP 4

To exit TIS, enter CNTRL Z.

Result: Returned to DCL.

Test Procedure 2.2, Start System — Cold

Purpose: To test the creation of the TIS detached processes.

Required data: None.

STEP 1

Enter TIS mode and enter the TIS command START/COLD.

STEP 2

Exit TIS and do a SHOW SYSTEM.

Result: The process name table contained ICEHANDLE, FILEOPS, JOBOPS, TAPEOPS, USERMSGP, and SYSINITRM.

STEP 3

At a different terminal, enter TIS and the command START/COLD.

Result: System Initiator Terminator was already active; the start operation was cancelled.

Test Procedure 2.3, Start System — Warm

Purpose: To test that the Job Input Queue is restored on a warm start.

Required data: MSGJOB JCL in TIS\$TEST.

STEP 1

Enter the TIS command: SUBMIT TIS\$TEST:MSGJOB.JCL/PRINT

Enter the TIS command: SHOW/QUEUE INPUT

Result: The job MSGJOB was in the queue.

STEP 2

Enter the TIS command: STOP

Exit TIS and do a SHOW SYSTEM

Result: The VMS process name table did not contain any TIS processes.

STEP 3

Enter the TIS command: START/WARM

Enter the TIS command: SHOW/QUEUE INPUT

Result: The job MSGJOB was in the queue.

Test Procedure 2.4, Set User

Purpose: To test the capability to configure TIS users in the TIS User Authorization Table, which allows users access to TIS and defines their TIS privileges.

Required data: None.

STEP 1

Enter the following TIS commands for each user:

SET/PARAM USER 1745/PRIV:(USER)

STEP 2

Enter the TIS command: SHOW/USER

Result: The users had the username and privileges set in Step 1.

STEP 3

The users log onto the system and enter TIS.

Result: TIS prompt.

STEP 4

Log onto system from an account not entered in Step 1, and attempt to enter TIS.

Result: The user was denied access.

Test Procedure 2.5, Set AN/GYK-12

Purpose: To test the capability to set the AN/GYK-12 On Line and Off Line by a TIS manager.

Required data: None.

STEP 1

From a TIS managers account, enter the TIS command:

SET/PARAM SSIM ZERO ONLINE

STEP 2

Enter the TIS command:

SHOW/PARAM

Result: The display showed SSIM zero on line.

1.3 PSS OPERATIONS

Test Procedure 3.1 Down Line Load

Purpose: To down line load the AN/GYK-12 with the V042 PSS residing on a disk file.

Required data: V042.DAT

STEP 1

Enter TIS command:

BOOT ZERO TIS\$PSSLOAD:V042.DAT

Result: TIS — PSS bootstrap beginning.
****Waiting for Channel 11 Load pushbutton.

STEP 2

Set 07 in the test switches and set 16 in the ACC ADDRESS switches. Put instruction stop up. Push COMPUTER RESTART. Push the Channel 11 load pushbutton.

The boot terminal will display the message:

TIS — PSS initial bootstrap successfully completed.
Final SSIM I/O status (success) 1.
Total SSIM I/O byte count 31800.

STEP 3

On the AN/GYK-12 put INSTRUCTION STOP down and push START.

Result: A TIS message from SYSINITRM indicating the PSS initialization is beginning.

A TIS message from ICEHANDLE indicating that a PSS class list was received.

Test 3.1 (Continued)

A TIS message from JOBOPS indicating that no jobs are eligible for execution.

PSS initializations messages.

STEP 4

On the AN/GYK-12 put XFR Switch 8 up. With XFR Switch 1 down the Swapper will be started by PSS.

Result: A TIS message from JOBOPS indicating that a utility job has started execution in job slot 10. This job is the Swapper.

SYSINITRM will output messages indicating that loading the System File is in progress.

When the load was complete, PSS messages indicating the Version number, no RAAM, the number of pages on line, and that initialization was complete.

SYSINITRM output a message indicating that PSS initialization was complete.

ICEHANDLE displayed the class list received.

Test Procedure 3.2 Send Command

Purpose: To test the PSS operator communications using the SEND command.

Required data: None.

STEP 1

Enter the TIS command:

SEND 0:1 D 05DEC82, 1000

Result: PSS message indicating day of week.

STEP 2

Enter the TIS command:

SEND 0:1 LD ALL

Result: PSS report of peripheral device status, device address, usage, error, and retry statistics for all devices.

Test Procedure 3.3 Test Message

Purpose: To test the automatic and manual test messages initiated by TIS.

Required data: None.

STEP 1

To test the manual test message enter the TIS command:

TEST ZERO

Result: PSS test ICE successfully received.

STEP 2

To test the automatic test message enter the TIS command:

SET/PARAM AUTO_TEST ZERO ON

Result: TIS periodically sent a test ICE to PSS. To validate that the test was successful, ADUMP was run. The last ICE received was a test ICE.

Test Procedure 3.4 Execute a PSS Job

Purpose: To test the capability to start a PSS job slot, dequeue the job submitted in Test Procedure 2.3, and execute the job.

STEP 1

Enter the TIS command:

SEND 0:1 S 3

Result: A PSS message — Input Stream 3 started on the PSS operators manual.

A TIS message form JOBOPS indicating that the job MSGJOB is executing in job slot 3.

When the job terminates the output will be printed.

Test Procedure 3.5 Suspend Job Input Queue

Purpose: To suspend the Job Input Queue

Required data: None.

STEP 1

After the job terminated in Test Procedure 3.4, PSS attempts to start a job every six seconds. To suspend the Job Input Queue, enter the TIS command:

SET/QUEUE INPUT HOLD

Result: A TIS message from JOBOPS indicated that the Job Input Queue was suspended.

Test Procedure 3.6 Job Input Queue Entry On Hold

Purpose: To release the queue suspended in procedure 3.5, submit a job and put that entry on hold.

Required data: MSGJOB.JCL in TIS\$TEST

STEP 1

To release the Job Input Queue, enter the TIS command:

SET/QUEUE INPUT RELEASE

STEP 2

To submit the job, enter the TIS commands:

SUBMIT/HOLD TIS\$TEST:MSGJOB.JCL

SEND 0:1 S 3

STEP 3

Check that the job is in the queue and on Hold; enter the TIS command:

SHOW/QUEUE INPUT

Result: The display showed the job MSGJOB on Hold, and no jobs were dequeued for execution.

STEP 4

Enter the TIS command:

SET/QUEUE INPUT MSGJOB RELEASE

Result: The job MSGJOB executed.

Test Procedure 3.7 Cancel a Previously Submitted Job

Purpose: To remove a job from the input queue.

Required data: MSGOUT.JCL in TIS\$TEST

STEP 1

Submit the job MSGJOB by entering the TIS command:

SUBMIT TIS\$TEST:MSGJOB.JCL/PRINT

STEP 2

Enter the TIS command:

SHOW/QUEUE INPUT

Result: The job MSGJOB was in the queue.

STEP 3

Enter the TIS command:

CANCEL MESSAGES

STEP 4

Enter the TIS command:

SHOW/QUEUE INPUT

Result: The queue was empty.

Test Procedure 3.8 MUFD Manipulation

Purpose: To test the capability to add, remove, display and update the MUFD.

Required data: None.

STEP 1

To print the current MUFD, enter the TIS command:

```
DISPLAY/PRINT ALL
```

Result: A listing of all PSS filenames and the corresponding VMS device and directory and the default blocksize and filetype for all entries in the MUFD was printed on the line-printer defined by the VMS logical name SYSS\$PRINT.

STEP 2

To add PSS filenames to the MUFD, enter the TIS commands:

```
CREATE/SRC72/BL:126 TSTNAME1 DRB2:[TIS.TEST]  
CREATE/SRC80/BL:126 TSTNAME2 DRB1:[TIS.TEST]  
CREATE/OTHER/BL:120 TSTNAME3 DRB1:[TIS.TEST]
```

STEP 3

To display the entries created, enter

```
DISPLAY TSTNAME1  
DISPLAY TSTNAME2  
DISPLAY TSTNAME3
```

Results: The filename, VMS device and directory, blocksize, and type for each PSS file was displayed.

Test 3.8 (Continued)

STEP 4

To update a MUFD entries, enter the TIS commands:

UPDATE/SRC72/BL:126 TSTNAME1 DRB1:[TIS.DATA]

UPDATE/SRC72/BL:126 TSTNAME2 DRB1:[TIS.TEST]

UPDATE/OTAER/BL:800 TSTNAME3 DRB3:[TIS.TEST]

Result: The VMS device and directory for TSTNAME1 was DRB1:[TIS.DATA].
The type for TSTNAME2 was Source 72.
The blocksize for TSTNAME3 was 800.

STEP 5

To remove MUFD entries, enter the TIS commands:

REMOVE TSTNAME1

REMOVE TSTNAME2

REMOVE TSTNAME3

DISPLAY/PRINT

Result: The entries created in this procedure were not in the MUFD.

Test Procedure 3.9 TACPOL Compile

Purpose: To test the capability to perform a PSS compilation.

Required data: REALSTUF.JCL in TIS\$TEST.

STEP 1

To enqueue the job enter the TIS command:

```
SUBMIT INPUT TIS$TEST:REALSTUF.JCL/PRINT
```

STEP 2

Start the job by entering the TIS command:

```
SEND 0:1 S 4
```

Result: The compilation was run in job slot 4.

The job output was printed and an object file for the job was created.

Test Procedure 3.10 Cancel a Job with a Dump

Purpose: To test the capability to process job termination with a PSS OSDUMP.

Required data: REALSTUF.JCL in TIS\$TEST.

STEP 1

Perform the steps in Test Procedure 3.7. After the job begins execution, enter the TIS command:

SEND 0:1 C 4, DUMP

Result: JOBOPS output a TIS message indicating that UTILITY job was executing in job slot 11.

When this job terminated the dump was printed.

The job running in job slot 4 was terminated and its output was printed.

Test Procedure 3.11 Scroll Output

Purpose: To test holding the job output for scrolling by the user.

Required data: REALSTUF.JCL in TIS\$TEST.

STEP 1

To hold the job output for scrolling, enter the TIS command:

```
SUBMIT TIS$TEST:REALSTUF.JCL/SCROLL
```

STEP 2

Enter the TIS command:

```
SEND 0:1 S 4
```

Result: The job was run in job slot 4. When the compilation was complete, JOBOPS output a message indicating that the output is held for scrolling.

STEP 3

Set the default directory by entering the VMS command:

```
SET DEFAULT TIS$OUTFILES
```

STEP 4

Scroll the job output by entering the VMS command:

```
TYPE REALSTUF.LIS
```

Result: The listing for the job with the logger file was displayed on the screen.

Test 3.11 (Continued)

STEP 5

Put the Job Input Queue on hold by entering the TIS command:

SET/QUEUE INPUT HOLD

Test Procedure 3.12 PSS Job Requiring Tape Drives

Purpose: To test the Attach/Detach commands and dequeuing of PSS jobs requiring VMS tape drives.

Required data: TAPEJOB.JCL in TIS\$TEST.

STEP 1

Enter the job on the Job Input Queue by entering the TIS command:

```
SUBMIT TIS$TEST:TAPEJOB.JCL/PRINT
```

STEP 2

Release the queue by entering the TIS command:

```
SET/QUEUE INPUT RELEASE  
SEND 0:1 S 3
```

Result: JOBOPS output a message indicating no jobs eligible for execution since the tape drive was not attached to the job.

STEP 3

Enter the TIS commands:

```
SET/PARAM PSSZERO TAPE0 MFA0:  
ATTACH PSSZERO TAPE0 TAPEJOB2 1192
```

Result: The job TAPEJOB was dequeued and executed.

STEP 4

After the job terminates, detach the tape drive by entering the TIS command:

```
DETACH PSSZERO TAPE0 TAPEJOB2
```

Test 3.12 (Continued)

STEP 5

Resubmit the job.

Result: The job did execute because the tape drive was not attached.

Test Procedure 3.13 Class List Dequeuing

Purpose: To test that only one job of the class K-N can execute; i.e., if a class K job is running then another class K job will not be dequeued until the current one terminates.

Required data: CLASKJOB.JCL in FIS\$TEST
CLASNJOB.JCL in TIS\$TEST

Procedure not performed since a PSS system supporting class K-N was not available.

Test Procedure 3.14 SYSGEN

Purpose: To test the capability to perform a PSS system generation.

Required data: PSIN.JCL, PSAF.JCL, PSSY.JCL and PSSC.JCL in TIS\$TEST. The JCL listing is provided in Appendix 1.

STEP 1

To execute the first step of the sytem generation process, INITGEN, enter the TIS command:

```
SUBMIT TIS$TEST:ASIN.JCL/PRINT
```

STEP 2

Start INITGEN by entering the TIS command:

```
SEND 0:1 5 6
```

Result: The job COATPSIN executed in job slot 6. The job created three members of file PSS CMPSYSF-CPU042, INIT042, TPE042. Enter the VMS commands:

```
SET DEFAULT CMPSYSF
```

```
DIR/FU
```

The directories for these files were displayed.

STEP 3

To exeucte the second step of the SYSGEN, AFFIN, enter the TIS command:

```
SUBMIT TIS$TEST:PSAF.JCL/PRINT
```

Result: The job ran in job slot 6 and created the member PSSA042 of PSS file CMPSYSF. Enter the VMS command DIR/FU PSSA042.DAT to display the directory for this file.

Test 3.14 (Continued)

STEP 4

The third phase of the SYSGEN PROCESS, STPGEN, is executed by entering the TIS command:

SUBMIT TIS\$TEST:PSSY.JCL/PRINT

Result: The job CQATPSSY ran in job slot 6. The job created the PSS member C042 of the PSS file. Enter VMS command:

DIR/FU C042.DAT

The directory for this file was displayed.

STEP 5

The final step of the SYSGEN process, PSSC, is executed by entering the TIS command:

SUBMIT TIS\$TEST:PSSC.JCL/PRINT

Result: The job CQATPSSC ran in job slot 6. The system file for version 42, V042.DAT was created.

STEP 6

To verify the SYSGEN process was correctly done, boot the new SYSTEM FILE with the TIS command:

BOOT ZERO device-name [CMPSYSF] V042.DAT

When the boot operation was complete, test procedures from the PSS operations test were successfully performed.

1.4 TIS TERMINATION

Test Procedure 4.1 Normal Termination

Purpose: To test the capability to stop TIS with an idle PSS.

Required data: None.

STEP 1

If any PSS job slots are started, but no jobs are active, enter the TIS command:

SEND 0:1 P job slot number

STEP 2

When all input streams have terminated, enter the TIS command:

STOP

Result: TIS — STOP operation initiated.

STEP 3

Enter the VMS command:

SHOW SYSTEM

Result: No TIS processes were displayed.

Test Procedure 4.2 TIS Termination with Active PSS Jobs

Purpose: To test the logical disconnect between the TIS and PSS with graceful termination of active PSS jobs.

STEP 1

Start several PSS jobs with the TIS commands:

```
SUBMIT TIS$TEST:MSGJOB.JCL/PRINT
SUBMIT TIS$TEST:REALSTUF.JCL/PRINT
SUBMIT TIS$TEST:PSIN.JCL/PRINT
SEND 0:1 S 3
SEND 0:1 S 4
SEND 0:1 S 5
```

STEP 2

When all jobs have started, enter the TIS command:

```
CLUP ZERO
```

Result: All the active jobs were terminated and the entries deleted from the Job Input Queue. ADUMP was run to verify that GYK-STATE is a one and no entries exist on the JIQ.

Test Procedure 4.3 TIS Termination After a PSS Crash

Purpose: To test the logical disconnect between TIS and PSS after a PSS crash.

Required data: MSGJOB.JCL, REALSTUF.JCL, and PSIN.JCL

STEP 1

Enter the TIS commands in Step 1 of Test Procedure 4.2.

STEP 2

When all TIS jobs have started, set instruction Stop up on the AN/GYK-12 to simulate a crash.

STEP 3

Enter the TIS command:

CHOP ZERO

Result: All jobs were forced to terminate and the output printed.

STEP 4

To verify that the jobs have not been deleted from the JIQ, enter the TIS command:

SHOW/QUEUE INPUT

Result: The jobs submitted in Step 1 were in the queue.

Test Procedure 4.4 TIS Backup

Purpose: To test the capability to backup the TIS system.

Required data: BACKUP.COM command procedure.

STEP 1

Hang the backup tape.

STEP 2

Enter the VMS commands:

SET DEFAULT [TIS]

@BACKUP

STEP 3

Answer yes to the prompt:

'Initialize and mount mag tape'

Result: The VMS Backup Utility saved all TIS files in a save set on the magnetic tape. After each file was written to tape the file specification was displayed.

STEP 4

If a listing of the save set is desired, answer yes to the save set listing prompt.

STEP 5

Answer yes to the prompt:

Dismount mag tape

1.5 TIS UTILITIES

Test Procedure 5.1 ADUMP

Purpose: To test the Articulated Dump utility which displays the TIS global area.

Required data: None

STEP 1

Enter the TIS symbol:

ADUMP

Result: The ADUMP utility program executed and displayed on the terminal the contents of the TIS global area.

Test Procedure 5.2 DISKPURGE

Purpose: To test the Disk Purge Utility which declassifies a disk pack by overwriting with pseudo-random members.

Required data: None.

STEP 1

Mount the disk foreign with the VMS command:

MOUNT/FOREIGN device name volume label.

STEP 2

Run DISKPURGE by entering the VMS command:

RUN TISSUTILITIES DISKPURGE

Result: Disk Purge output the prompt:

Enter VMS device name to be printed.

STEP 3

Enter device name such as DMA1.

Result: The disk was purged and the program terminated. The bad blocks on the disk pack were reported.

Test Procedure 5.3 Tape Utility

Purpose: To test the TIS Tape Utility, TAPEUTIL, which provides user selected function to position the tape, write tape marks, or label the tape.

Required data: TSTTAPE1

STEP 1

Mount the tape foreign by entering the VMS command:

MOUNT/FOREIGN VMS device name TSTTAPE1

Result: VMS mounted the tape.

STEP 2

Run the Tape Utility program by entering the VMS command:

RUN TIS\$UTILITIES TAPEUTIL

Result: A menu of TIS functions will be displayed. These functions are:

1. Scratch the tape.
2. Write Tape Mark.
3. Rewind.
4. Rewind and unload.
5. Label tape (ASCII).
6. Label tape (EBCIDIC).
7. Skip record(s).
8. Skip file(s).

STEP 3

Enter 8 to select skip files.

Result: User prompt to:

ENTER NUMBER TO SPACE

Test 5.3 (Continued)

STEP 4

Enter 3 to skip 3 files.

Result: The tape moved forward skipping 3 files. When complete the message:
SKIP complete. 3 files skipped.
was displayed and the menu of functions was displayed.

STEP 5

Enter 7 to select skip records.

Result: User prompt to:
ENTER NUMBER TO SPACE

STEP 6

Enter 1 to space 1 record.

Result: The tape was spaced 1 record and the message:
SKIP complete. 1 record skipped.
was displayed and the menu was displayed.

STEP 7

Enter 3 to rewind the tape.

Result: The tape was rewound, the completion displayed, and the menu of functions displayed.

Test 5.3 (Continued)

STEP 8

Enter 5 to label the tape in ASCII format.

Result: User prompt to enter 1-6 character label.

STEP 9

Enter label.

Result: The 80 character ANSI VCL 1 label was written. A completion message and the menu of functions were displayed.

STEP 10

Enter 2 to write a tape mark.

Result: One tape mark will be written, the completion message and menu of functions were displayed.

STEP 11

Enter 6 to label the tape in EBCDIC format.

Result: User prompt to enter label.

STEP 12

Enter label.

Result: The 80-byte EBCDIC label was written, the completion message and menu of functions were displayed.

Test 5.3 (Continued)

STEP 13

Enter 1 to scratch the tape.

Result: The tape was scratched by rewinding the tape and writing two tape marks. The completion message and menu of functions was displayed.

STEP 14

Enter 4 to rewind and unload the tape.

Result: The tape was rewound and unloaded. The completion message and menu of functions were displayed.

STEP 15

Enter 9 to exit.

Test Procedure 5.4 POPTOP

Purpose: To test transferring an output file to tape.

Required data: TSTTAPE2, REALSTUF.LIS

STEP 1

Mount the tape foreign by entering the VMS command:

MOUNT/FOREIGN UMS device name TSTTAPE2

Result: VMS mounted the tape.

STEP 2

Run POPTOP by entering the VMS command:

RUN TISSUTILITIES POPTOP

Result: The user prompt: A labeled tape must be mounted foreign on drive.
Enter volume serial number.

STEP 3

Enter volume serial number.

Result: A menu of functions was displayed; these functions were:

1. Print output to tape.
2. Punch output to tape.
3. Both print and punch output to tape.
4. Write end of volume and exit.

Test 5.4 (Continued)

STEP 4

Enter 1 to select print output.

Result: The user prompt: Enter PSS job name (1-8 characters).

STEP 5

Enter PSS job name REALSTUF

Result: The header labels were written, 14 print lines per block were written to tape and the trailer records written. When complete, the menu of functions was displayed.

STEP 6

Enter 4 to write end of volume and exit.

Result: Two tape masks were written and the program exited.

2. CONCLUSIONS/RECOMMENDATIONS

The Tactical Interface System has successfully completed the Acceptance Test Plan as specified by CDRL Item Number E001. This system meets the requirements as stated in the Statement of Work for Contract Number DAAK80-81-C-0010.

END

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